## REMARKS

Claims 9-16 are currently pending with claims 9 and 16 being independent. The Office Action indicates that claims 10-11 stand rejected under 35 U.S.C. §112 ¶2 for allegedly being unclear. In response, Applicant has amended these claims, without adding new matter, to clarify the language.

Specifically, Applicant has amended claim 10 to clarify that the selected transmission mode is the one having the highest bandwidth achievable given the detected transmission quality of the radio channel. Claim 9 (the base claim) recites detecting the transmission quality of the radio channel, and thus, that characteristic is quantified. According to claims 10, a selected transmission mode is selected for that given transmission quality. *E.g., Spec.*, p.3 ln. 20 – p. 4, ln. 2; p. 8, ll. 12-21. Additionally, Applicant has replaced the term "greatest bandwidth" with the term "highest bandwidth" to address the noted concerns on page 3 of the Office Action.

Claim 11 has also been amended, without adding new matter, to correct a minor typographical error. Particularly, claim 11 now properly depends from claim 9. Further, Applicant has replaced the term "greatest bandwidth" with the term "highest bandwidth" to address the above-noted concerns. *E.g., Spec.*, p. 4, ll. 4-15. In light of the foregoing amendments, Applicant respectfully requests that the Examiner withdraw the §112 rejections.

In addition, the Office Action indicates that claim 9 stand rejected as being anticipated by Chow (U.S. Pat. No. 6,748,220). In response, Applicant has amended claim 9 to clarify the claim language. Claim 9 is directed to a method of transmitting data over a radio channel between two radio interfaces that support a plurality of physical transmission modes at different bandwidths. As amended, claim 9 recites, "establishing more than one group of virtual channels on the radio channel, each group having an allocated bandwidth....." Chow does not teach this limitation.

Chow discloses a method of improving data transfer between a plurality of mobile stations (MSs) and a base station (BS) using an improved resource allocation scheme. Particularly, the disclosed scheme allocates a larger proportion of the available resources to the channels that are of a higher quality and have a higher transfer rate. According to Chow, the disclosed scheme serves to increase the aggregate rate of the BS. *E.g., Chow*, col. 3, ll. 1-7.

In Chow, communications can occur between a single MS and a BS, or a plurality of MSs and the BS. Where communications are between a single MS and the BS, there are two radio interfaces – one for the MS and one for the BS. However, Chow never discloses establishing more than one group of virtual channels on that radio channel, as is recited in amended claim 9. Where communications are between a plurality of MSs and the BS, there are a plurality of virtual channels. However, in contrast to amended claim 9, the groups of virtual channels are not established between two radio interfaces. That is, because there are multiple MSs communicating with the BS, there must be more than two radio interfaces between the MSs and the BS.

In addition, amended claim 9 recites that each group of virtual channels has an allocated bandwidth. Chow does not disclose this limitation. Rather, Chow teaches that the bitrate is allocated on a per MS basis. Bitrate allocation performed on a per MS basis, as is doen in Chow, does not teach, "establishing more than one group of virtual channels on the radio channel, each group having an allocated bandwidth...," as recited by amended claim 9.

Therefore, Chow fails to disclose every element of amended claim 9. As such, Chow does not anticipate amended claim 9, or any of its dependent claims.

The other independent claim – claim 16 – is directed to a data transmission network and stands rejected as being anticipated by Chow for reasons similar to those stated for claim 9. However, claim 16 has also been amended and now recites, "a radio channel comprising more than one group of virtual channels interconnecting the first and second radio interfaces, each

group being allocated a bandwidth to transmit data between the first and second groups of nodes such that the sum of the allocated bandwidths is less than or equal to a total bandwidth of the radio channel when the radio channel is operating in a basic transmission mode."

Therefore, for reasons similar to those stated above, Chow does not anticipate claim 16.

Finally, the Office Action cites Chow in view of either Parkvall (U.S. Pat. No. 6,542,736) or Kokko (U.S. Pat. No. 6,005,852) to support §103 rejections against claims 12 and 13-14, respectively. However, claims 12-14 depend from claim 9. Because claim 9 is patentable, so, too, are claims 12-14. Futher, neither Parkvall nor Kokko remedy Chow. As such, all pending claims are patentable over the art of record.

In light of the foregoing amendments and remarks, Applicant respectfully requests allowance of all pending claims.

Respectfully submitted,
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